

CURABLE EPOXY RESIN COMPOSITIONS AND THE CURED RESIDUES THEREOF

Abstract of Disclosure

A cured composition is the cured residue of a curable composition including (a) an epoxy resin essentially free of bromine atoms, a curing agent for the epoxy resin, (b) a flame retardant additive that is the condensation product of (i) a brominated phenol or a mixture of brominated phenols with (ii) a cyanuric halide; and (c) a thermoplastic resin. The preferred epoxy resin is a mixture of an epoxy resin with less than 2 glycidyl ether groups per molecule and an epoxy resin that has greater than 2 glycidyl ether groups per molecule. The preferred flame-retardant additive is a brominated heterocyclic compound that preferably is a triazine. The preferred thermoplastic resin is a poly(phenylene ether). The cured composition further including a reinforcement may be used in the manufacture of circuit boards having excellent electrical properties, good solvent resistance, and good thermal expansion characteristics. Laminates including the cured compositions and a metal foil are also described.